

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.-34. (Cancelled)

35. (Currently Amended) A queue management system for managing access to a plurality of services for a group of people ~~by way of having a mobile telephone~~personal communicator, and for controlling the movement of the group through queue lines for said services, comprising:

a mobile telephone having an address;

a registration pack for registering the group with the system, the registration pack comprising an information carrier and a set of ID tag elements, in which a respective tag element is supplied for each member of the group, the information carrier bearing a ~~printed~~ registration code and the ID tag elements ~~respectively being comprising portable tags wristbands~~ respectively comprising scannable labels including ID values for identifying the members of the group, the registration pack further associating the registration code with an indication of group size and uniquely with the ID values;

interface means for enabling communications with the ~~personal communicator~~ mobile telephone through a mobile telephone network;

a processor coupled with the interface means to receive communications from the mobile telephone ~~personal communicator~~ via the mobile telephone network, the processor being responsive to a said communication including ~~at the communicator~~ address and the registration code for generating a registration record for the group representing the group size, the ID values and the ~~communicator~~ address;

means for storing the registration record;

the processor being responsive to a further said communication from the mobile telephone ~~personal communicator~~ specifying the selection of a respective service amongst the plurality of services to enter the group into a virtual queue for the respective service and thereafter to monitor the place of the group in the virtual queue line and to trigger a summons signal when the group approaches or reaches the head of the virtual queue line;

the interface means being responsive to the summons signal for initiating a communication to the mobile telephone personal communicator for summoning the group to the respective service; and

access control apparatus at the respective service responsive to presentation of the ID tag elements for scanning reading the label of each respective ID tag element and for comparing the ID values with the registration record in order to evaluate whether access to the respective service should be permitted or prevented.

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Previously Presented) A queue management system according to claim 35, in which the information carrier is a card and the registration code is an alphanumeric value.

42. (Cancelled)

43. (Cancelled)

44. (Previously Presented) A queue management system according to claim 35, comprising at least one registration station.

45. (Cancelled)

46. (Previously Presented) A queue management system according to claim 35, in which the processor is arranged to track the progress of the group through the virtual queue line by periodically noting the reduction in the number of people in the virtual queue line ahead of the group.
47. (Previously Presented) A queue management system according to claim 35, in which the processor comprises means for calculating a movement forward for the virtual queue and is arranged to track the progress of the group through the virtual queue line by periodically calculating a value representing the movement forward.
48. (Previously Presented) A queue management system according to claim 35, in which the processor comprises means responsive to receipt of the further communication for initiating a timing period, means for calculating a queuing time starting from the beginning of the timing period, and means for generating an indication of an expected service entry time for the group based on a calculated value representing the queuing time.
49. (Previously Presented) A queue management system according to claim 47, in which the processor comprises a memory for storing a service throughput profile, and in which the calculating means calculates the calculated value based on the stored service throughput profile.
50. (Previously Presented) A queue management system according to claim 49, in which the service throughput profile is based on records of previous use of the service.
51. (Previously Presented) A queue management system according to claim 49, further comprising monitoring apparatus for monitoring an actual service throughput, and in which the processor is arranged to receive information from the monitoring apparatus for updating the stored service throughput profile.

52. (Previously Presented) A queue management system according to claim 47, in which the calculating means performs calculations repeatedly as the group progresses through the virtual queue and repeatedly updates the calculated value.
53. (Previously Presented) A queue management system according to claim 35, in which the virtual queue line is combined with a physical queue line and in which the processor is arranged to monitor the place of the group in the overall queue line.
54. (Previously Presented) A queue management system according to claim 35, further comprising means for storing an itinerary for the group representing visits for the plurality of services, and in which the processor is arranged to process and manage the itinerary for the group.
55. (Previously Presented) A queue management system according to claim 54, further comprising a plurality of itinerary management stations in communication with the processor for enabling the group to create, modify and input the itinerary.
56. (Cancelled)
57. (Currently Amended) A method of queue management for managing access to a plurality of services for a group of people by way of having a mobile telephonepersonal communicator and for controlling the movement of the group through queue lines for said services, comprising the steps of:
- employing a mobile telephone of a member of the group, said mobile telephone having an address;
- assigning to the group a registration pack, the registration pack comprising an information carrier and a set of ID tag elements respectively for each member of the group, the information carrier bearing a printed registration code and the ID tag elements respectively being comprising portable wristbands comprising tabs respectively scannable labels including ID values for identifying the members of the group;

associating the registration code with an indication of group size and uniquely with the ID values;

communicating with the mobile telephone ~~personal communicator~~ through a mobile telephone network, including receiving communications from and sending communications to the mobile telephone ~~personal communicator~~ via the mobile telephone network, and:

in response to a said communication from the mobile telephone ~~personal communicator~~ including a ~~communicator~~ the address and the registration code, registering the group with the system by generating and storing a registration record for the group representing the group size, the ID values and the ~~communicator~~ address;

in response to a further said communication from the mobile telephone ~~personal communicator~~ specifying the selection of a respective service amongst the plurality of services, assigning the group a place in a virtual queue for the respective service and thereafter monitoring the place of the group in the virtual queue line and triggering a summons signal when the group approaches or reaches the head of the virtual queue line;

in response to the summons signal, initiating a said communication to the mobile telephone ~~personal communicator~~ for summoning the group to the respective service; and

at the respective service in response to the presentation of the ID tag elements scanning the label of ~~reading~~ each respective ID tag element and comparing the ID values with the registration record in order to evaluate whether access to the respective service should be permitted or prevented.

58. (Cancelled)

59. (Cancelled)

60. (Cancelled)

61. (Cancelled)

62. (Cancelled)

63. (Previously Presented) A method of queue management according to claim 57, in which the step of assigning a registration pack includes generating the ID tag elements.

64. (Cancelled)

65. (Previously Presented) A method of queue management according to claim 57, in which the step of monitoring comprises tracking the progress of the group through the virtual queue line by periodically noting the reduction in the number of people in the virtual queue line ahead of the group.

66. (Previously Presented) A method of queue management according to claim 57, in which the step of monitoring comprises tracking the progress of the group through the virtual queue line by periodically calculating a value representing movement forward for the virtual queue.

67. (Previously Presented) A method of queue management according to claim 57, comprising the steps of: in response to receipt of the further communication initiating a timing period, calculating a queuing time starting from the beginning of the timing period, and generating an indication of an expected service entry time for the group based on a calculated value representing the queuing time.

68. (Previously Presented) A method of queue management according to claim 66, comprising storing a service throughput profile, and calculating the queuing time based on the stored service throughput profile.

69. (Previously Presented) A method of queue management according to claim 68, in which the service throughput profile is based on records of previous use of the service.

70. (Previously Presented) A method of queue management according to claim 68, comprising receiving information concerning an actual service throughput from the service for updating the stored service throughput profile.
71. (Previously Presented) A method of queue management according to claim 67, further comprising performing calculations repeatedly as the group progresses through the virtual queue and repeatedly updating the calculated value.
72. (Previously Presented) A method of queue management according to claim 57, in which the virtual queue line is combined with a physical queue line and comprising monitoring the place of the group in the overall queue line.
73. (Previously Presented) A method of queue management according to claim 57, further comprising storing an itinerary for the group representing visits to a plurality of services, and processing and managing the itinerary for the group.
74. (Cancelled)